### MEMORANDUM FOR RECORD

**SUBJECT:** Minutes from the Northern Gulf of Mexico Regional Sediment Management Demonstration Technical Working Group Meeting, 16-17 May 2000

- 1. The US Army Corps of Engineers, Mobile District (CESAM), hosted the third meeting of the Northern Gulf of Mexico Regional Sediment Management (RSM) Demonstration Program's, Technical Working Group (TWG) on 16-17 May 2000 at the International Trade Club in Mobile, AL. The meeting agenda and list of attendees are provided as Enclosures 1 and 2, respectively. Mr. Roger Burke, CESAM, began the meeting with introductions and opening remarks.
- 2. Mr. Larry Parson, CESAM, presented an overview of the RSM program for the benefit of new TWG members and participants. The meeting then focused on the status of ongoing RSM activities. The first activity discussed was the Sub-regional Workshops. Under direction of the TWG, the main objective of the workshops is to promote regional management participation at the three levels of government (federal, state and local). The workshops will target local interests by introducing the regional management concept, informing local interests of RSM activities, solicit local participation, and identify local perceptions of the problems and solutions. Another objective is to identify demonstration initiatives or problem areas within each sub-region, assess current management practices, and recommend a plan of action towards a timely resolution of identified problems. The overall goal of each demonstration initiative is to implement more effective management practices to maximize retention of sand in the littoral system. The first in a series of workshops is scheduled on 24 May 2000 for the Mobile and Baldwin Counties, AL, sub-regions. The meeting will be held with the Alabama Coastal Erosion Task Force. Workshop minutes will be posted on the program web site.
- 3. Ms. Jennifer Wozencraft, CESAM, discussed the status of the baseline dataset, which provides the basis for identifying both historical changes and future impacts to the region. The baseline consists of data collected from October 1997 to July 2000 for the Florida and Alabama coasts and includes hydrographic and topographic data, beach profiles, and aerial photography. Hydrographic and topographic data were obtained from the National Imagery and Mapping agency, the FDEP 1998 and RSMD 2000 Scanning Hydrographic Operational Airborne Lidar Survey surveys, CESAM Irvington Site Office recent channel surveys, the FDEP, the Naval Oceanographic Office, and the University of South Alabama. Because the FL shorelines are abundant in information and data while the AL shoreline is lacking, the RSMD FY00 data collection efforts are focusing on the Alabama coast. Beach profiles are being collected along the AL beaches at 1000-ft intervals extending from dune toe to the 30-ft contour, or about 3-mi offshore. A Mobile Pass ebb shoal survey is in processing. The Alabama Department of Economic and Community Affairs (ADECA) aerial photography will be scanned and georeferenced by the RSMD. The FDEP and ADECA photography as well as all obtained datasets will be incorporated into the regional data management and GIS system.

- 4. Ms. Linda Lillycrop, CESAM, discussed the status of the regional sediment budget and numerical modeling efforts. The sediment budget activity was initiated through development of a conceptual regional sediment budget based on available historical information. The initial budget revealed the Alabama coasts were greatly lacking in information in comparison to the Florida coasts. Continued gathering and analysis of historical data will refine the historical budget. In conjunction with the historical budget, CHL is currently applying the Steady Wave (STWAVE), Generalized model for Simulating Shoreline Change (GENESIS), and Advanced Circulation (ADCIRC) hydrodynamic models to calculate magnitude and direction of potential longshore sediment transport (PLST) and evaluate circulation patterns over the region. Littoral cells, nodal zones, and areas of erosion and accretion will be identified. The PLST will be calculated regionally, then sub-regionally, with the initial focus in the Alabama region. The PLST rates will be calibrated and refined based on historical information. The historical and PLST will be input to the Sediment Budget Analysis System (SBAS 2000) for evaluating sediment transport over the region. The outcome of this activity will be an integrated historical and potential sediment budget over the entire demonstration region.
- 5. Mr. Parson summarized the program budget. The RSM Demonstration Program received a million dollars appropriated by Congress from the O&M budget for FY00 activities. A detailed list was presented as to how the funds are be expended. In addition to the original funding the program has identified and leveraged other sources of funding in excess of \$300K to help accomplish RSM objectives. Leveraging these funds also benefits other projects and programs.
- 6. Mr. Parson concluded the first day by reviewing the status of the December 1999 TWG meeting action items. A majority of the action items were categorized as being ongoing activities. The TWG recommended that SAM report action items status in a different format.
- 7. Ms. Joan Pope, Coastal and Hydraulics Laboratory, began the second day with an overview of the National Shoreline Erosion Control Development and Demonstration Program (Section 227). The program was established by Section 227 of the 1996 WRDA with initial funding appropriated for FY00. The program provides a means for the Corps to evaluate the functional performance of innovative or non-traditional approaches towards controlling shoreline erosion and improving retention of sediments. Various shoreline protection techniques will be constructed, monitored, and evaluated at various sites around the U.S. The program will consider a minimum of seven demonstration projects on various coastlines: two on the Atlantic coast, one on the Gulf coast, two on the Pacific coast, and two on the Great lakes. The program is able to take advantage of existing projects where innovative approaches are being used through the sponsorship of others. Performance of applied techniques will be evaluated as related to interaction with the coastal system as well as various other engineering considerations. Nominations for demonstration sites are still being considered and are coordinated through USACE Coastal District Offices and ERDC.
- 8. Dr. Scott Douglass, University of South Alabama, presented his outline for the development of the Perdido Pass inlet management plan (IMP). The IMP is funded by the State of Alabama. Dr. Douglass' approach consists of a literature review, data collection and analysis, summarizing engineering history, evaluation of wave climate to compute potential LST, shoreline change

analysis, sediment volume analysis in and around the inlet, formulation of a sediment budget, and quantification of engineering impacts. In order to develop an IMP, evaluation of the existing inlet and performance must be critical. This is necessary to identify and correct problems and provide recommendations for improvement of inlet management and to minimize impacts. It was recommended that bypassing be considered as a ranging value based on environmental conditions rather than a set value. A proactive approach towards ecosystem and habitat management should also be considered.

- 9. Mr. Chuck Hamilton, City of Gulf Shores, discussed the Gulf Shores beach nourishment program presently underway. The renourishment program is in response to damages caused by a series of hurricanes that have affected the region over the last five years. An estimated 3-5 ft of elevation was lost from the Gulf Shores beaches over this time period. The City plans to place 1.4 Mcy over a stretch of 16,000 ft of beach. This will raise and extend the beach with an overfill berm to approximately +7 ft, and significant underwater placement to dissipate wave energy. The project must consider private property owner easements, which are defined to be the area between the MHW line and the private property bulkheads/structures. A permanent MHW line was established to define state property boundaries. Once the nourishment is complete, snow fencing, irrigation, and vegetation will be utilized to encourage dune growth and stabilization. The City will realize the following benefits: hurricane protection, enhanced recreation, a FEMA approved hurricane management plan, and Federal funding for renourishment following hurricanes. The city has hired Olsen and Associates to help them accomplish their objectives.
- 10. Mr. Parson discussed the benefits derived to date from the RSM effort and stressed the importance of identifying increased benefits. A discussion of the benefits defined the following categories of benefits: those that meet federal objectives (NED, RED, Environmental Quality, and Other Social Effects) and intangible or non-traditional benefits. A list of the intangible benefits were presented and discussed. Other benefits were identified by the TWG and are listed under the flip chart notes (Enclosure 3).
- 11. Ms. Lillycrop discussed lessons learned to date from the RSM program as well as future activities for FY01. The TWG identified additional lessons learned and recommended other activities that should be considered for FY01and FY02. These additions are listed in the flip chart notes (Enclosure 3).
- 13. Mr. Parson concluded the meeting by reviewing new action items, listed in Enclosure 3. SAM will conduct follow-up correspondence with each action item POC to monitor the status of the action items. Finally, it was recommended that the TWG meet every four months instead of every six months. The next TWG meeting will be held in September 2000, the dates and location are to be announced.

# NORTHERN GULF REGIONAL SEDIMENT MANAGEMENT DEMONSTRATION PROGRAM

## Technical Working Group Meeting Agenda

## May 16-17, 2000 Mobile, Alabama

# May 16 – International Trade Center, Killian Room, 1<sup>st</sup> Floor

Time	Topic	Presenter
1300 -1310	Welcome and Introductions	Burke
	Program Status:	
1310 -1325	Overview:	Parson
1325 -1340	Sub-regional Workshops	Parson
1340 -1400	Baselining Effort	Wozencraft
1400 -1420	Data Management/GIS	Penton
1420 -1440	Sediment Budget/Modeling	Lillycrop
1440 -1500	IWR Involvement	Burke
1500 -1515	BREAK	
1515 -1530	Budget	Parson
1530 -1645	Action Items - Last Meeting	Parson
1645 -1700	Questions and Open Discussion	All

Enclosure 1		

# NORTHERN GULF REGIONAL SEDIMENT MANAGEMENT DEMONSTRATION PROGRAM

## Technical Working Group Meeting Agenda

May 16-17, 2000 Mobile, Alabama

# May 17 – International Trade Center, Killian Room, 1<sup>st</sup> Floor

Time	Topic	Presenter
0800 – 0820	National Shoreline Erosion Control Development and Demonstration Program	Pope
0820 - 0840	Perdido Pass Inlet Management Plan	Douglass
0840 – 0900	Gulf Shores, Alabama Beach Nourishment Program	Hamilton
0900 – 0930	RSM Benefits	All
0930 – 1000	BREAK	
1000 – 1030	Lessons Learned	All
1030 – 1100	FY01 Activities	All
1100 – 1145	Discussion Actions Items Next Meeting	All
1145	Adjourn	

Enclosure 1 (cont)

# Regional Sediment Management Technical Working Group Meeting May 16 & 17, 2000, List of Attendees

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Enclosure 2

### Flip Chart Notes From May 2000 TWG Meeting

#### **Benefits**

- 1. TWG continue to provide recommendations towards inlet management
- 2. Enhancement of environment and fish habitat
- 3. Identifying institutional obstacles.
- 4. Identifying legislative obstacles.
- 5. Mobile Harbor SIBUA.
- 6. Cooperation towards state and local funded studies such as inlet management plans.
- 7. Reduced inlet maintenance impacts.
- 8. Regional Management Plan
- 9. All levels of government equally knowledgeable and mesh with public.

#### **Lessons Learned**

- 1. Develop long-term demonstration plan.
- 2. Maintain/develop communication and coordination with agencies interested in region.
- 3. Maintain focus on goals, big picture.
- 4. Determine data collection requirements for RSM FY03
  - who collects, costs
- 5. Assist partners in developing data collection / management program.
- 6. Identify other major data collection efforts.
- 7. Identify other funding sources

### FY01-02 Activities

- 1. Expand program to include environmental/habitat restoration, Coordinate w/EL
- 2. Expand to fine grained sediments in estuaries
- 3. Communication out reach at the community level
- 4. Partner with RM agencies and combine efforts (USGS)
- 5. Expand region to Mississippi
- 6. Continue identification of benefits (traditional/non-traditional)
- 7. Continue development of regional data management and GIS
- 8. Continue refinement of regional sediment budget
- 9. Continue development of predictive tools
- 10. Implement demonstration initiatives
- 11. Continue regional monitoring.

### **Action Items**

- 1. Combine RSM workshops w/FDEP. FDEP provide dates and mailing lists to SAM POC: Woodruff, Parson
- 2. Evaluate wave runner for nearshore surveying. POC: Woodruff, L. Lillycrop
- 3. Baseline datums FDEP/NOAA. POC: Wozencraft
- 4. Resolve profile alignment. POC: L. Lillycrop
- 5. Meet w/ NESDIS. POC: J. Lillycrop

Enclosure 3		

- 6. Educate public on keeping sand in littoral syste m ie. sand mining at Perdido Pass. POC: TWG
- 7. Continue gaining FEMA involvement. POC: Rees, Parson
- 8. Establish AL Shore & Beach Preservation Association POC: Alabama Coastal Erosion Task Force
- 9. More effective way to track/document action items status. POC: Parson, Lillycrop
- 10. Educate public on the disadvantages of "fuzzy" solutions. POC: TWG
- 11. Get NGRSM website online ASAP POC: J. Lillycrop
- 12. Invite Corps Regulatory to participate in TWG (SAM & SAJ) POC: Rees, Parson
- 13. Identify habitat issues that RSM can address. POC: Parson, Rees, and Langan
- 14. Add Fish & Wildlife & Wildlife Consv Service (Mary Cone) POC: Rees, Parson
- 15. Identify obstacles (institutional & legislative) TWG continue to push through coastal state issues. POC: Hinesley, Langan, TWG
- 16. Coordinate dredging schedules w/better placement for RSM POC: Langan
- 17. Continue workshops with meeting on annual/semi-annual basis. POC: SAM
- 18. Comprehensive geosciences database. POC: AGS, SAM
- 19. Identify data collection agencies and funding sources for FY03 POC: SAM
- 20. NOAA-CSC/USGS/NASA digital imagery topography POC: SAM Spatial Data Brch
- 21. Look at effects of sea level rise (FDEP in-house com) on beach restoration 25/50/100 years. For identification of long-term trends. POC: AGS
- 22. Global climate change and relationship w/storm frequency and intensity. Info for baseline. POC: AGS

23. Invite NOAA CSC to TWG. POC: SAM

Enclosure 3 (cont)